

TECHNICAL REVIEW DOCUMENT
for
RENEWAL OF OPERATING PERMIT 95OPMN085
to be issued to:

Northwest Pipeline GP
Pleasant View Station
Montezuma County
Source ID 0830034

Revised October 2012

Operating Permit Engineer:	Geoffrey Drissel
Operating Permit Supervisor review:	Matthew Burgett
Field Services Unit review:	Tim Taylor

I. Purpose:

This document will establish the basis for decisions made regarding the applicable requirements, emission factors, monitoring plan and compliance status of emission units covered by the renewal operating permit proposed for this site. The original Operating Permit was issued July 1, 1997. This document is designed for reference during the review of the proposed permit by the EPA, the public, and other interested parties. The conclusions made in this report are based on information provided in the renewal application submitted June 14, 2011, additional information submitted June 12, 2012, previous inspection reports and various e-mail correspondence, as well as telephone conversations with the applicant. Please note that copies of the Technical Review Document for the original permit and any Technical Review Documents associated with subsequent modifications of the original Operating Permit may be found in the Division files as well as on the Division website at <http://www.colorado.gov/cs/Satellite/CDPHE-AP/CBON/1251596446069>. This narrative is intended as an adjunct for the reviewer and has no legal standing.

Any revisions made to the underlying construction permits associated with this facility made in conjunction with the processing of this operating permit application have been reviewed in accordance with the requirements of Regulation No. 3, Part B, Construction Permits, and have been found to meet all applicable substantive and procedural requirements. This operating permit incorporates and shall be considered to be a combined construction/operating permit for any such revision, and the permittee shall be allowed to operate under the revised conditions upon issuance of this operating permit without applying for a revision to this permit or for an additional or revised Construction Permit.

II. Source Description:

This source is classified as a natural gas compression facility defined under Standard Industrial Classification 4922. Gas is compressed to specification for transmission to sales pipelines using Combustion Turbines to power compressor units. An emergency generator is also located at the Pleasant View site.

The facility is located in Montezuma County near the Town of Pleasant View in an area designated as attainment for all criteria pollutants. This source is a true minor with respect to Prevention of Significant Deterioration (PSD) requirements. The facility is located within 50 miles of the Utah, Arizona, and New Mexico borders. Additionally, two Federal Class I areas, the Weminuche National Wilderness Area and Mesa Verde National Park, are located within 100 kilometers of the facility. The facility has certified that they are not subject to the Accidental Release provisions of section 112(r) of the Clean Air Act. Facility wide emissions are as follows:

<u>Pollutant</u>	<u>Potential to Emit (tpy)</u>	<u>Actual (tpy)</u>
NOx	193.6	74.2
VOC	20.4	7.9
CO	71.4	27.0

Potential emissions are based on permit limits contained in the current Operating Permit. Actual emissions are based upon information provided during a facility inspection conducted on 3/21/12 showing 2010 values. This facility is required to provide an updated APEN in the event that emissions of any of the above air pollutants increase 5% or 50 tons per year, whichever is less, above the level reported on the last APEN submitted to the APCD.

MACT Applicability

HHH – Natural Gas Transmission and Storage:

40 CFR Part 63 Subpart HHH, “National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage”, applies to operators of glycol dehydrators at major sources of HAP emissions. The Pleasant View Compressor Station is an area source of HAP’s and does not operate any glycol dehydrators. Thus the facility is not subject to this subpart.

HH – Oil and Natural Gas Production Facilities:

Under the provisions of 40 CFR Part 63 Subpart HH, “National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities” (Oil and Natural Gas Production MACT), only HAP emissions from glycol dehydrators and storage vessels with the potential for flash emissions need to be aggregated to determine whether the facility is a major source for HAPs for production field facilities. The Pleasant View Compressor Station is an area source of HAP’s and does not operate any glycol dehydrators. Thus, the facility is not subject to this subpart.

ZZZZ – Stationary Reciprocating Internal Combustion Engines:

Under the rules for reciprocating internal combustion engines, for production field facilities, only emissions from glycol dehydrators, storage vessels with the potential for flash emissions, reciprocating internal combustion engines and combustion turbines need to be aggregated to determine if the facility is a major source for HAPS. Total HAP emissions for this facility, based on permitted operations, have been calculated to be less than major source levels. MACT ZZZZ requirements for engines at major sources of HAPs therefore do not apply.

MACT ZZZZ includes requirements for engines located at area sources of HAPs. Based on manufacturing date and commencement of operation date, MACT ZZZZ requirements apply to the emergency generator engine at this facility. This engine is considered existing and must comply with the requirements set forth in ZZZZ.

NSPS Applicability

GG - Standards of Performance for Stationary Gas Turbines

NSPS GG includes requirements for stationary combustion turbines with a heat input at peak load equal to or greater than 10.0 MMBtu/hour that commenced construction, reconstruction or modification after October 3, 1977. The turbines at this facility were constructed in 1993 and thus are subject to Subpart GG. This subpart limits the amount of sulfur that may be contained in the natural gas that fuels the turbines. As allowed under provisions of Subpart GG, Northwest Pipeline has elected to comply with the total sulfur requirement by providing a copy of a current tariff sheet requiring that the gas delivered to fuel the turbines has less than 5 grains of sulfur per 100 ft³ (NW Pipeline FERC Gas Tariff, 5th Revised Volume No. 1), satisfying the demonstration under §60.334(h)(3)(i). In addition, this subpart limits NO_x emissions from the turbines.

KKKK - Standards of Performance for Stationary Combustion Turbines

NSPS KKKK includes requirements for stationary combustion turbines with a heat input at peak load equal to or greater than 10.0 MMBtu/hour that commenced construction, reconstruction or modification after February 18, 2005. The turbines at this facility were not constructed, reconstructed or modified after this date and are, therefore, not subject to this NSPS Subpart.

KKK - Onshore Natural Gas Processing Plants

NSPS KKK describes requirements for limiting emissions of fugitive VOC's from onshore natural gas processing plants. The Pleasant View Station does not meet the definition of an onshore gas processing plant and thus is not subject to this NSPS Subpart.

JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

NSPS JJJJ includes requirements for spark ignition internal combustion engines that commenced construction (i.e., ordered by the owner or operator) after June 12, 2006 and manufactured on or after July 1, 2007 (40 CFR §60.4230(4)) or commenced modification or reconstruction after June 12, 2006 (40 CFR §60.4230(5)). Based on construction and manufacturing date records provided by Northwest Pipeline, NSPS JJJJ requirements do not apply to the emergency generator engine.

OOOO – Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution

EPA published the final Subpart OOOO rule in the Federal Register on August 16, 2012.

At production field facilities, Subpart OOOO applies to reciprocating and centrifugal compressors, pneumatic controllers and storage vessels that were constructed, modified or reconstructed after August 23, 2011. All of the compressors and tanks at Pleasant View were constructed prior to this date.

Subpart OOOO excludes natural gas transmission in the regulation of pneumatic controller, as stated in §60.5365(a)-(g). This subpart does regulate condensate storage tanks located at natural gas transmission facilities, although the regulation only applies to storage tanks with VOC emissions greater than 6 tpy. There are no atmospheric condensate storage tanks located at this facility that have VOC emissions greater than 6 tpy. Thus, based on this facility's status as a natural gas transmission facility and its negligible condensate storage tank emissions, Subpart OOOO requirements do not apply to the Pleasant View station.

Reg 7 Applicability

Section XVII.C - Section XVII.C requires owner/operators of atmospheric condensate storage tanks at oil and gas exploration and production operations, natural gas compressor stations, natural gas drip stations and natural gas processing plants to install air pollution control equipment capable of reducing emissions by at least 95% on tanks with actual uncontrolled emissions of 20 tons per year (tpy) VOC or greater by May 1, 2008. There are no atmospheric condensate storage tanks with actual uncontrolled VOC emissions of 20 tpy or more located at Pleasant View and the facility is, therefore, not subject to Regulation No. 7, Section XVII.C.

Section XVII.D - Section XVII.D applies statewide and requires that glycol dehydrators at natural gas compressor stations with actual uncontrolled emissions equal to or greater than 15 tons of VOC per year install air pollution control equipment to reduce those emissions by at least 90 percent. There are no dehydrators located at Pleasant View and the facility is, therefore, not subject to Regulation No. 7, Section XVII.D.

Section XVII.E.2.b - Section XVII.E.2 applies statewide to engines that commenced construction or relocation into Colorado after July 1, 2007. The engine at this facility was constructed before this date and is, therefore, not subject to this section of Regulation No. 7.

Section XVII.E.3.a - Section XVII.E.3.b applies statewide and requires all existing natural gas-fired rich burn engines with manufacturer's nameplate design rating greater than 500 hp to install and operate emission controls by July 1, 2010. The engine at this facility has a design rating less than 500 hp and is, therefore, not subject to this section of Regulation No. 7.

Compliance Assurance Monitoring

Emissions from the turbines and engine at this facility are not controlled with a pollution control device. Therefore, CAM does not apply to these units.

Source Determination

With this permit action, the Division revisited the source determination in regards to the natural gas operations in the area surrounding the Pleasant View facility to verify that the proper pollutant emitting activities are included in this permit as part of the Pleasant View Compressor Station. NWP did not identify any other pollutant emitting activities in the vicinity of the Pleasant View facility that are dependent upon the Pleasant View Compressor Station to maintain operations. The Division considers the current determination for this facility to be accurate, and the proper pollutant emitting activities are included in this permit.

III. Discussion of Modifications Made

Source Requested Modifications

The source requested the following changes to their current Operating Permit:

- Addition of the turbine Alternative Operating Scenario to Section I of the permit
- Revisions to the Responsible Official.

Other Modifications

In addition to the requested changes, the Division has included changes to make the permit more consistent with recently issued permits, including comments made by EPA on other Operating Permits, as well as to correct errors or omissions identified during review of this renewal. These changes are as follows:

Section II – Specific Permit Terms

- The Cummins engine that was previously designated as an insignificant activity has been listed as a separate emission unit as a result of the incorporation of applicable requirements into NESHAP Subpart ZZZZ for engines located at area sources of HAPs. This engine is considered an existing emergency engine and the appropriate MACT ZZZZ requirements have been added to Section II of the Operating Permit.
- Maintenance and blowdown emissions have been incorporated as a separate emission source.

Section IV - General Conditions

- The General Conditions were updated to reflect the most current version.

IV. Greenhouse Gasses:

The potential-to-emit of greenhouse gas (GHG) emissions from this facility is less than 100,000 TPY CO₂e. Future modifications greater than 100,000 TPY CO₂e may be subject to regulation (Regulation No. 3, Part A, I.B.44).